

## POWER SECTION

**Model No: AT475782.2 SLOW**

Revised: 9/22/2020

Rotor Specifications	
	inches
Overall Length	191.00
Contour Length	185.00
Major Diameter	2.805
Eccentricity	0.161
Head diameter	2.825
Thread Form	1.375-6 SA
Weight	270 lbs
Material	17-4 PH <sup>1</sup>

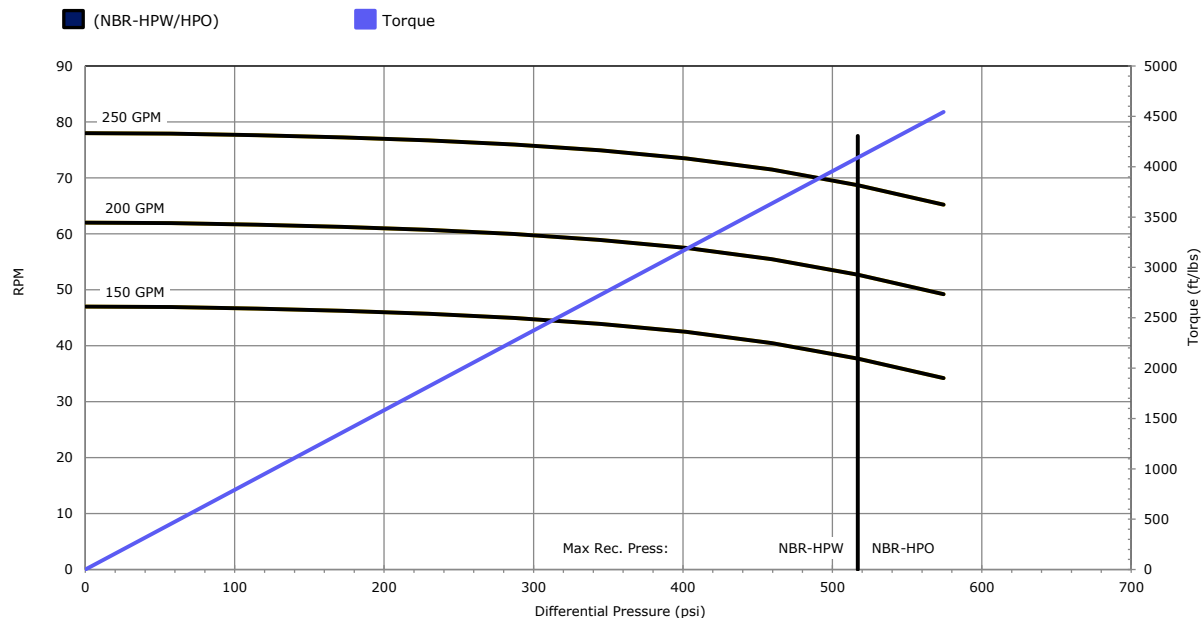
Stator Specifications	
	inches
Overall Length	198.00
Tube OD	4.75
Tube ID	3.75
Rubber Cutback Top/End	8.00 / 8.00
Weight	427 lbs
Number of Stages	2.2
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	2.481	0.002	0.015	0.029	0.050	0.064
.5 OS	2.490	-0.008	0.006	0.020	0.041	0.055
1.0 OS	2.501	-0.019	-0.005	0.009	0.030	0.043
1.5 OS	2.511	-0.029	-0.015	-0.001	0.019	0.033
2.0 OS	2.520	-0.038	-0.024	-0.010	0.010	0.023
2.5 OS						

NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	2.481	0.002	0.015	0.029	0.050	0.064
.5 OS	2.490	-0.008	0.006	0.020	0.041	0.055
1.0 OS	2.501	-0.019	-0.005	0.009	0.030	0.043
1.5 OS	2.511	-0.029	-0.015	-0.001	0.019	0.033
2.0 OS	2.520	-0.038	-0.024	-0.010	0.010	0.023
2.5 OS						

Performance Specifications	
Flow Range (gpm)	150 - 250
Speed Range (rpm)	50 - 80
Torque Slope (ft-lb/psi)	7.91
Rotation (rev/gal)	0.310
Off Bottom Pressure (psi)	40

Performance Details		NBR-HPW	NBR-HPO
Max Diff Press (psi)		520	520
Stall Diff Press (psi)		820	820
Max Torque (ft-lb)		4090	4090
Stall Torque (ft-lb)		6450	6450



<sup>1</sup> Coating options of chrome or tungsten carbide are available <sup>2</sup> Vector Gauge Readings at Room Temp 75°F <sup>3</sup> BHCT Exceeding 320°F will void warranty for NBR-HPW/HPO.

Performance curves are based on new rotor and stator dimensions and for reference only. Actual performance may vary depending on fit and drilling conditions. The stall torque may exceed that specified for the connected components. Operating over the recommended limits may result in damage to the power section and connected components. Please visit [www.AbacoDrilling.com](http://www.AbacoDrilling.com) for the latest specification revisions.

### LOCATIONS

US: Headquarters 713 Northpark Central Dr., #400 Houston, TX 77073 - Tel: (281) 869-0700 - Fax: (281) 869-0701  
 US: Sales & Distribution 11308 West Interstate 20 East, Odessa, TX 79765 - Tel: (432) 248-1814  
 CANADA: Stator Manufacturing 6303-39th Street Leduc, Alberta T9E 0Z3 Canada - Tel: (780) 986-8947 - Fax: (780) 986-8842  
 DUBAI UAE: Stator Manufacturing Oilfields Supply Center B#57, Jebel Ali, Dubai UAE, P.O. Box 19909 - Tel: 971-4-870-8600

## POWER SECTION - METRIC

**Model No: AT475782.2 SLOW**

Revised: 9/22/2020

Rotor Specifications	
	mm
Overall Length	4851.4
Contour Length	4699.0
Major Diameter	71.25
Eccentricity	4.10
Head diameter	71.76
Thread Form	1.375-6 SA
Weight	122 kg
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	mm
Overall Length	5029.2
Tube OD	120.7
Tube ID	95.3
Rubber Cutback Top/End	203.0 / 203.0
Weight	194 kg
Number of Stages	2.2
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (mm)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	63.02	0.04	0.68	1.00	1.31	1.63
.5 OS	63.25	-0.19	0.44	0.76	1.08	1.39
1.0 OS	63.53	-0.47	0.16	0.47	0.79	1.10
1.5 OS	63.78	-0.72	-0.10	0.21	0.52	0.83
2.0 OS	64.01	-0.95	-0.33	-0.02	0.28	0.59
2.5 OS						

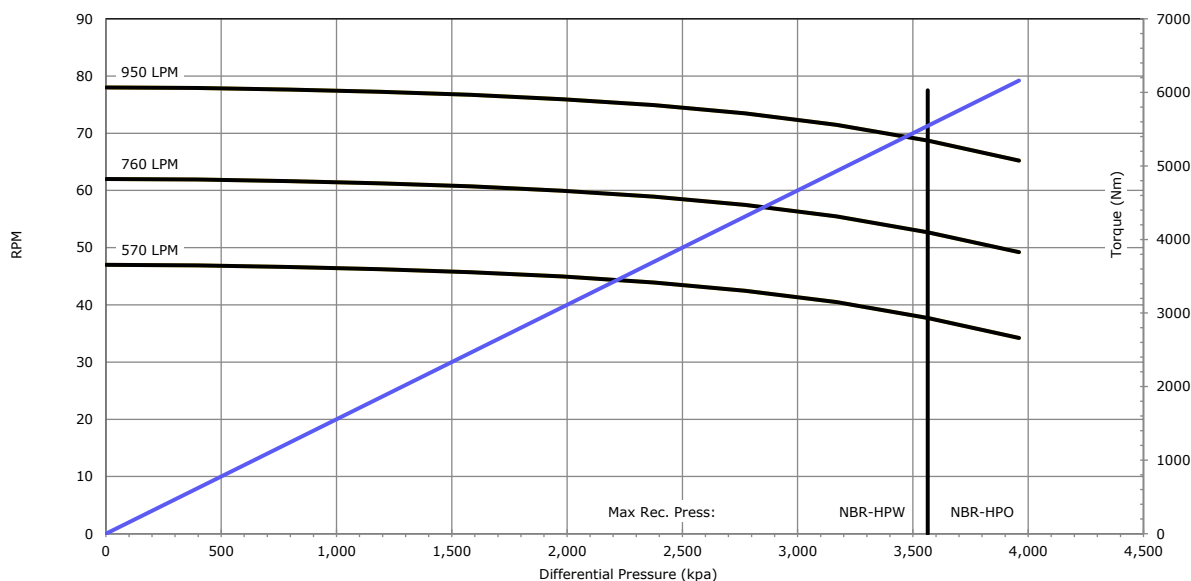
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	63.02	0.04	0.68	1.00	1.31	1.63
.5 OS	63.25	-0.19	0.44	0.76	1.08	1.39
1.0 OS	63.53	-0.47	0.16	0.47	0.79	1.10
1.5 OS	63.78	-0.72	-0.10	0.21	0.52	0.83
2.0 OS	64.01	-0.95	-0.33	-0.02	0.28	0.59
2.5 OS						

Performance Specifications	
Flow Range (lpm)	570 - 950
Speed Range (rpm)	50 - 80
Torque Slope (Nm/kpa)	1.56
Rotation (rev/Liter)	0.0819
Off Bottom Pressure (kpa)	260

Performance Details		
	NBR-HPW	NBR-HPO
Max Diff Press (kpa)	3600	3600
Stall Diff Press (kpa)	5600	5700
Max Torque (Nm)	5600	5600
Stall Torque (Nm)	8800	8800

■ (NBR-HPW/HPO)

■ Torque



<sup>1</sup> Coating options of chrome or tungsten carbide are available <sup>2</sup> Vector Gauge Readings at Room Temp 25°C <sup>3</sup> BHCT Exceeding 160°C will void warranty for NBR-HPW/HPO.

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